

What we Claim is:

1. A software defined radio comprising:

a plurality of communication schemes; a configuration system for selectively enabling one of the plurality of communication schemes comprising a processor, a smartcard reader and a memory; wherein the one of the plurality of communication schemes is selected and enabled by the processor based on information from a user's smartcard.
2. The software defined radio according to claim 1, wherein the plurality of communication schemes includes a plurality of communication protocols.
3. The software defined radio according to claim 1, wherein the plurality of communication schemes include a plurality of modulation/demodulation techniques.
4. The software defined radio according to claim 1, wherein the plurality of communication schemes include a plurality of coding/decoding techniques.
5. The software defined radio according to claim 1, wherein the information retrieved from the smart card comprises a communication scheme.
6. The software defined radio according to claim 1, wherein the information retrieved from the smartcard comprises a security authorization.
7. The software defined radio according to claim 1, comprising a programmable A/D converter or a programmable D/A converter.

8. The software defined radio according to claim 1, comprising a programmable digital signal processor.
9. The software defined radio according to claim 7, wherein the program for driving the programmable A/D converter or programmable D/A converter is stored in the memory.
10. The software defined radio according to claim 8, wherein the program for driving the programmable digital signal processor is stored in the memory.
11. In a software defined radio ("SDR"), the SDR comprising layered communication information and plural communication protocols, a method of configuring the SDR, the improvement comprising the steps of: providing a smartcard containing configuration information; retrieving the configuration information from the smartcard; and, configuring the SDR based on the configuration information.
12. The method of claim 11, comprising the step of selecting the layered communication information and plural communication protocols is based on the configuration information.
13. The method of claim 11, wherein the configuration information includes authorization information.
14. The method of claim 11, wherein the step of configuring comprises selecting and executing stored software modules for driving generic radio hardware according to the configuration information.

15. The method of Claim 14, wherein the generic radio hardware is selected from the group of microprocessors, modulators/demodulators, digital signal processors

16. In a Software defined radio comprising multiple link-layered communication protocols, a method for configuring the SDR, the improvement comprising retrieving configuration instructions from a smartcard containing a specific configuration.

17. The method of Claim 16, wherein the specific configuration includes, modulation/demodulation type, digital processing and operational protocols.

18. The method of Claim 16, wherein the specific configuration is selected from the group of AMSSB, FM, PSK, QPSK, QAM, FSK, TDMA, CDMA, FDMA, AMPS, and GSM.

19. A software defined radio comprising a RF Section, a IF section and a baseband section, wherein the IF section and the baseband sections are programmable, a plurality of software modules containing programs for the IF section and the baseband section, the improvement comprising a smart card reader, wherein information retrieved by the smart card reader designates the respective programs for the IF section and the baseband section.

20. The software defined radio of claim 19, wherein the information is based on the service requirements of a user.

21. The software defined radio of claim 19, wherein the information is based on the mission requirements of a user.

22. The software defined radio of claim 19, wherein the information is based on the security status of the user.

23. The software defined radio of claim 19, wherein programs are selected from the group enabling AMSSB, FM, PSK, QPSK, QAM, FSK, TDMA, CDMA, FDMA, AMPS, and GSM configurations.

24. A method for configuring a radio with software for communicating in a wireless environment, the method comprising the steps of:

receiving configuration information from a smart card in communication with the radio;

configuring the radio in accordance with the configuration information, said configuration information allowing the radio to communicate in the wireless environment.

25. The method of claim 24, further comprising the step of verifying current validity of the smartcard.